

ZENECA Professional Products

ARCHER[®]
INSECT GROWTH REGULATOR

This is a specimen label and may be inaccurate or out of date. It is intended as a guide in providing general information regarding use of this product.
Always read and follow the EPA approved label on the product container.

ZENECA Professional Products

ARCHER® INSECT GROWTH REGULATOR

An insect growth regulator (IGR) for use in homes, apartments, schools, warehouses, offices, and other private, commercial, or public buildings, in nonfood preparation areas of food handling and processing establishments, in transport vehicles, animal housing facilities, and barrier treatments on and adjacent to buildings and structures and in pet areas.

ACTIVE INGREDIENT

2-[1-Methyl-2-(4-phenoxyphenoxy) ethoxy] pyridine	1.3%
INERT INGREDIENTS*	98.7%
TOTAL	100.0%

*Contains petroleum distillates

EPA Reg. No. 10182-433

KEEP OUT OF REACH OF CHILDREN CAUTION

STATEMENT OF PRACTICAL TREATMENT

IF IN EYES: Flush with plenty of water. Get medical attention if irritation persists.

IF SWALLOWED: Call a physician or Poison Control Center immediately. Do not induce vomiting because of aspiration pneumonia hazard.

IF ON SKIN OR CLOTHING: Remove contaminated clothing and wash before reuse. Wash skin with soap and warm water. Get medical attention if irritation persists.

IF INHALED: Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention.

ARCHER® Insect Growth Regulator is an emulsifiable concentrate

- Use of ARCHER Insect Growth Regulator provides a single IGR that provides effective control of cockroaches, fleas, ticks, ants, carpet and litter beetles, and flying insects by preventing the development of juvenile pest stages.
- ARCHER Insect Growth Regulator can be used as part of an integrated pest management (IPM) program, in combination with other insecticides or alone, and as an aid to prevent the development of insecticide resistance.
- ARCHER Insect Growth Regulator is photostable for up to 14 days, delivering effective residual control of outdoor pests such as fleas and cockroaches, even in areas with direct sunlight.
- ARCHER Insect Growth Regulator does not cause stain or odor when used as directed.
- When used as directed, ARCHER Insect Growth Regulator retains activity against pre-adult fleas for up to 7 months, and against pre-adult cockroaches for up to 6 months.
- Reduces egg production in house flies and prevents larval development into adults.

FOR 24-HOUR EMERGENCY MEDICAL ASSISTANCE, CALL
1-800-F-A-S-T-M-E-D (327-8633).

FOR CHEMICAL EMERGENCY: Spill, leak, fire, exposure, or accident, call
CHEMTREC, 1-800-424-9300.

FOR PRODUCT INFORMATION: Call the ZENECA Product Information
Toll-Free Hotline 1-888-617-7690.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

HARMFUL IF SWALLOWED OR ABSORBED THROUGH SKIN. DO NOT BREATHE VAPORS OR SPRAY MIST. Avoid contact with skin or eyes. In case of contact, flush with plenty of water. Wash with soap and warm water after use. Obtain medical attention if irritation persists. Avoid contamination of food or feedstuffs.

ENVIRONMENTAL HAZARDS

This product is toxic to fish and aquatic invertebrates. Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash waters.

PHYSICAL AND CHEMICAL HAZARDS

Do not use or store near heat or open flame.

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product should be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather, presence of other materials or other influencing factors in the use of the product, which are beyond the control of ZENECA or Seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold ZENECA and Seller harmless for any claims relating to such factors.

ZENECA warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of this product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or ZENECA, and Buyer and User assume the risk of any such use. ZENECA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

In no event shall ZENECA or Seller be liable for any incidental, consequential or special damages resulting from the use or handling of this product. **THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF ZENECA AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF ZENECA OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

ZENECA and Seller offer this product, and Buyer and User accept it, subject to the foregoing conditions of sale and limitations of warranty and of liability, which may not be modified except by written agreement signed by a duly authorized representative of ZENECA.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Read all precautions and use directions completely before use.

FAILURE TO FOLLOW THE DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN POOR INSECT CONTROL OR ILLEGAL RESIDUES.

GENERAL USE INFORMATION

For best results, follow directions for specific use areas. Do not use this product in or on electrical equipment due to possibility of shock hazard. Avoid excessive wetting of carpet, draperies, and furniture. Always test in a hidden area prior to use as some natural and synthetic fibers may be adversely affected by any liquid product.

The active ingredient in ARCHER Insect Growth Regulator is pyriproxyfen, an insect growth regulator (juvenile hormone mimic). ARCHER Insect Growth Regulator acts similarly to insect growth hormones that occur naturally in insects and acts on the immature life stages of the target insect, preventing the adult from developing. In some species, such as fleas and flies, ARCHER Insect Growth Regulator also has activity on adult insects by affecting the reproductive organs.

ARCHER Insect Growth Regulator will control cockroaches, fleas, ants, litter beetles, crickets, and flying insect pests in and around homes, apartments, and nonfood storage and preparation areas of agricultural, industrial, institutional, and commercial buildings and transport vehicles. ARCHER Insect Growth Regulator may be used to create outside barriers around structures to prevent indoor invasion by listed pest species.

May not be applied directly to raw agriculture food/feed commodities in warehouses or transportation vehicles, but may be applied in storage areas where food items are sealed, such as bottled, boxed, or canned items, so that food contact is not anticipated.

GENERAL USE PRECAUTIONS

- Do not apply to occupied aircraft cabins.
- Do not allow adults, children, or pets to contact treated surfaces until area treated has completely dried.

Specific areas where treatments may be made include but are not limited to the areas listed below:

EXAMPLES OF SPECIFIC TREATMENT AREAS INCLUDE: aircraft (cargo areas only), animal quarters, animal research facilities, apartments, attics, barns, bathrooms, basements, bedrooms, buses, cabinets, cabins, cargo holds, carpets, livestock housing (unoccupied), closets, commercial

buildings, condominiums, crawl spaces, decks, dens, dog houses, dog kennels, dormitories, draperies, factories, floors, funeral parlors, garages, garbage cans, gazebos, homes, hospitals, hotels, industrial plants, institutions, jails, kennels, living rooms, locker rooms, mobile homes, motels, nursing homes, office buildings, outdoor pet or animal runs or enclosures, patios, pet bedding, pet carriers, pet grooming parlors, pet living/sleeping areas, pet stores, porches, poultry houses (unoccupied), prisons, public buildings, railroad cars, recreation vehicles, rugs, schools and child care centers, ships, storage areas, swine facilities (unoccupied), theaters, town-houses, trailers, trains, transport vehicles, upholstered furniture, utility rooms, veterinaries, warehouses, and washrooms.

APPLICATION RATES FOR ARCHER INSECT GROWTH REGULATOR

ARCHER Insect Growth Regulator should be mixed in water utilizing the market increments on the squeeze-and-pour bottle according to the following rates. For "crack and crevice" and "spot" treatment, follow the rate per gallon of water.* For "area" and "general surface" treatment, follow the rate per unit area** to ensure good coverage.

Pest	*Amount of ARCHER Insect Growth Regulator per Gallon of Water	**Amount of ARCHER Insect Growth Regulator per Unit Area	Comments
Ants	2 fl. oz. per gallon	2 fl. oz. per 1,000 square feet	Apply to nesting and traveled areas.
Cockroaches, crickets	2 fl. oz. per gallon	2 fl. oz. per 1,000 square feet	Increase carrier (water) volume as necessary for good surface wetting (e.g., in mulch) along exterior walls.
Fleas, ticks, ¹ carpet beetles	1 fl. oz. per gallon	1 fl. oz. per 1,500 square feet	Increase carrier (water) volume as necessary for penetration of dense materials, e.g., thick carpet and vegetation along exterior walls.
Flying insects (Flies, gnats, midges, mosquitoes, and moths)	1 fl. oz. per gallon	1 fl. oz. per 1,500 square feet	Wet surfaces used for resting and breeding.
Litter beetles (Dermestids, darkling, hide, ² and carrion beetles ²)	1 fl. oz. per gallon	1 fl. oz. per 1,500 square feet	Wet surfaces used for resting and breeding. Increase carrier (water) volume as necessary for penetration of litter and bedding materials.

¹Only for use on Lone Star ticks in California.

²Not approved for use in California.

MIXING PROCEDURE:

ARCHER Insect Growth Regulator is intended to be mixed with water and applied with application equipment such as hand-held, backpack, or power spray equipment. Prepare an application dilution by adding 1 to 2 ounces per gallon of water according to the rate recommendation for the target pest as given above.

1. Fill applicator container ½ with water.
2. Add the amount of ARCHER Insect Growth Regulator to container as recommended in the rate table.
3. Shake, stir, or agitate.
4. Fill applicator tank with water to final volume recommended in rate table.
5. Shake, stir, or agitate again.
6. To ensure the highest quality control, prepared dilutions should be used within 24 hours and should be shaken, stirred, or agitated again if diluted material is not used for several hours.

Treatments in Combination with an Adulticide:

ARCHER Insect Growth Regulator may be combined with other insecticides to enhance control of adult insects, such as DEMAND® CS, PRELUDE®, DEMAND® PESTAB®, or DEMON® WP Insecticides. The combination provides for immediate control of adult fleas, cockroaches, crickets, and flying insects, while inhibiting the development of the immature stages of the pest insect. This application should conform to use precautions and use directions for both products.

CONTROL OF FLEAS, TICKS, AND CARPET BEETLES

ARCHER Insect Growth Regulator acts on immature stages of fleas, ticks, and beetles to prevent the development of adults. ARCHER Insect Growth Regulator causes a gradual reduction and ultimate elimination of the pest population by breaking the reproductive cycle by stopping the development of immature pest stages. ARCHER Insect Growth Regulator prevents the laying of viable eggs, affects the molting of flea larvae, and prevents normal pupae development into adult fleas. ARCHER Insect Growth Regulator can sterilize adult female fleas, and can control adults by disruption of the reproductive organs.

If a high population of adult fleas, ticks, or carpet beetles is present, the use of an adulticide may be necessary for immediate control. ARCHER Insect Growth Regulator may be combined with a flea adulticide such as PRELUDE Insecticide indoors, or DEMAND CS, DEMAND PESTAB, or DEMON WP Insecticide products outdoors. ARCHER Insect Growth Regulator complements the rapid activity of an adulticide by providing long-term control of pre-adult fleas for up to 7 months before they develop into biting adults. This application should conform to use precautions and directions for both products.

Flea and tick control on pets is important in the prevention of the introduction of adult fleas. Pets should be treated with an EPA-registered on-animal insecticide such as Defend®, or an effective flea powder, spray, dip, shampoo, or systemic (oral) product as part of a complete flea control program in conjunction with the application of ARCHER Insect Growth Regulator or ARCHER/adulticide combinations.

ARCHER Insect Growth Regulator can be used prior to the flea and tick season. Application of ARCHER Insect Growth Regulator in areas where pets and other animals are known to frequent and where previous infestations have been known to occur, will prevent the emergence of adult ticks and fleas by affecting immature stages. This early usage could reduce the need for conventional insecticides when used alone as directed. Treatment of these areas before the fleas become biting and reproductive adults will aid in reducing developing populations.

Treatments to Interior Areas and Surfaces:

Apply dilution of ARCHER Insect Growth Regulator at the rate of 1 gallon per 1,500 square feet of surface area, or in sufficient volume to achieve adequate coverage. Treat all areas that may harbor fleas, ticks, or carpet beetles, including carpets, furniture, pet sleeping areas, and throw rugs. Treat under cushions of upholstered furniture and where pets may rest.

- Prior to treatment, carpets, draperies, upholstered furniture, pet bedding or resting areas, and closets should be vacuumed thoroughly and the vacuum cleaner bag disposed of in an outdoor trash receptacle.
- If needed, repeat treatments with ARCHER Insect Growth Regulator may be made 21 days after previous treatment.

Treatments to Perimeter Areas and Surfaces:

To help control interior flea and tick infestations, make an outdoor perimeter treatment in a band 6 to 10 feet wide adjacent to the foundation wall of residential and nonresidential buildings, animal runs, and areas where the animals rest. Applications to those areas that are most frequented by pets will be most successful. Apply ARCHER Insect Growth Regulator inside and within a 2- to 4-foot banded area next to kennels and doghouses. Treatment of these areas will control the development of ticks and pre-adult fleas from becoming biting and reproductive adult fleas. Apply at the recommended rate to 1,500 square feet in sufficient water to obtain good coverage. Apply directly to building, resting areas, walls, floor, animal bedding, and run areas.

- If needed, repeat treatments with ARCHER Insect Growth Regulator may be made 14 days after last treatment, or if heavy rainfall occurs, repeat as necessary.
- Remove animals before applying and do not return animals to treated areas until area treated has completely dried.

CONTROL OF COCKROACHES (German, Asian, and Brown Banded) AND CRICKETS

ARCHER Insect Growth Regulator acts on the nymph stages of cockroaches and crickets, preventing them from developing into adults. Repeated (weekly, monthly, or quarterly) applications of ARCHER Insect Growth Regulator or ARCHER/adulticide combination will result in the development of cockroaches with twisted wings due to the IGR effects of ARCHER Insect Growth Regulator—these cockroaches are unable to reproduce. The unique properties of ARCHER Insect Growth Regulator can break the breeding cycle of the cockroach population, when used as directed.

If a high population of adult cockroaches is present, the use of an adulticide insecticide such as DEMAND CS or DEMAND PESTAB, or DEMON WP Insecticides may be necessary for immediate control. ARCHER Insect Growth Regulator complements the rapid activity of DEMAND CS, DEMAND PESTAB, or DEMON WP Insecticides by providing long-term (up to 6 months) control of cockroach nymphs before they become reproductive adults. Using ARCHER Insect Growth Regulator in combination with cockroach adulticides is also a useful strategy to minimize the development of resistance in the German cockroach. This application should conform to accepted use precautions and directions for both products. Use ARCHER Insect Growth Regulator at application rates specified in previous chart.

Treatments to Interior Areas and Surfaces:

Apply dilution of ARCHER Insect Growth Regulator at the rate of 1 gallon per 1,000 square feet of surface area as a spot treatment, surface application, or crack and crevice application. Special attention should be paid to typical hiding places such as along and behind baseboards, beneath sinks, and behind and beneath stoves, refrigerators, and cabinets. Apply to cracks and crevices, around garbage cans, and cabinets, along the outside of baseboards, door and window sills, door and window frames, and floors, around and on drains, pipes, and plumbing, behind bookcases, storage, and other utility installation areas, storage areas, and infested furniture, and the inside of cabinets and closets.

- Treat voids where pests can hide and similar areas.
- Repeat every 3 months or more frequently as necessary.

Treatments to Perimeter Areas and Surfaces:

Apply dilution of ARCHER Insect Growth Regulator in a band 6 to 10 feet wide adjacent to the foundation wall of the structure and apply to a height of 2 to 3 feet on the foundation where pests may be active or may find entrance. Apply as a residual application around window frames, doors, garage doors, patios, carports, shutters, garbage areas, and other areas where cockroaches may congregate.

- If needed, repeat treatments with ARCHER Insect Growth Regulator may be made 14 days after previous treatment, or if heavy rainfall occurs, repeat as necessary.

Treatments In and Around Warehouses:

ARCHER Insect Growth Regulator may be applied as a general surface, fogger, spot, or crack and crevice treatment in nonfood storage warehouses or in warehouses where stored food items are limited solely to sealed, impervious packaging, such as bottled or canned items, so that food contact is not anticipated. Apply to all areas that may harbor pests, including under and between pallets. Warehouses used to store raw or cured tobacco may only be treated when empty and may only be used to store tobacco again when treatments have completely dried.

Treatments in Food Handling Establishments (Places other than private residences in which food is held, processed, prepared, or served):

Nonfood Areas: ARCHER Insect Growth Regulator may be used to treat nonfood areas. Nonfood areas include areas such as garbage rooms,

lavatories, floor drains (to sewers), entries and vestibules, offices, locker rooms, machine rooms, boiler rooms, garages, mop closets, and storage (after canning or bottling).

Food Areas: ARCHER Insect Growth Regulator is not approved for application to food areas. Do not use in food areas of food-handling establishments, restaurants, or other areas where foods are commercially prepared or processed. May only be used in serving areas when facility is not in operation or food is not exposed. Serving areas are areas where prepared foods are served, such as dining rooms, but excluding areas where foods may be prepared or held. In the home, all food-processing surfaces and utensils should be covered during treatment or thoroughly washed before use. Food areas include areas for receiving, storage, packing (canning, bottling, wrapping, boxing), preparing, edible waste storage, and enclosed processing systems (mills, dairies, edible oils, syrups).

CONTROL OF LITTER BEETLES (Such as Darkling, Hide, and Carrion Beetles)

ARCHER Insect Growth Regulator can be applied to litter, such as in poultry houses infested with litter beetles, to break the lifecycle of these insect pests. When used as directed, ARCHER Insect Growth Regulator will not harm beneficial insects in animal litter or bedding, such as predatory wasps. Make uniform application of ARCHER Insect Growth Regulator to litter at the rate of 1 ounce of ARCHER Insect Growth Regulator concentrate per 1,000 square feet space in sufficient volume of water to thoroughly wet the litter. For effective prevention of beetle larvae in litter, remove animals from immediate treatment area and old litter. Surface treatment immediately after animals are removed and again just prior to new animal placement are most effective. Adult egg-laying beetles can be killed with fast-acting adulticides such as DEMAND CS or DEMAND PESTAB Insecticides. Application of adulticides to walls and floors at cleanout, before reintroduction of animals, will suppress beetles that escaped earlier treatment and will help delay onset of future infestations. Pay attention to areas where beetles frequently occur, such as walls, supports, cages, stalls, and around feeders. Do not contaminate food/feed or water.

Apply ARCHER Insect Growth Regulator uniformly at the rate of 1 ounce per 1,000 square feet to floor area and to walls, posts, and cage framing (birds grown in cages only). Application should also be made into cracks and crevices around insulation. Reapply after each growout or sanitization procedure. Indoor control can be enhanced by making perimeter treatments around the outside of building foundations to prevent immigrating adult beetles. Apply ARCHER Insect Growth Regulator or adulticide insecticides, or both, in a uniform band at least 1 foot up and 1 to 4 feet out from foundation. Maintaining a year-round treatment program will prevent background populations from reaching problem levels.

CONTROL OF ANTS

Apply ARCHER Insect Growth Regulator at the rate of 2 fluid ounces diluted in water per 1,000 square feet to interior areas where ants are actively foraging, and in a band 6 to 10 feet wide adjacent to the foundation wall of the building. ARCHER Insect Growth Regulator may be used in alternation or in a tankmix combination with an adulticide insecticide such as DEMAND CS, DEMAND PESTAB, PRELUDE, or DEMON WP Insecticides.

- If needed, repeat treatments with ARCHER Insect Growth Regulator may be made 14 days after previous treatment, or if heavy rainfall occurs, repeat as necessary.

CONTROL OF FLYING INSECT PESTS (Such as Flies, Gnats, Midges, Mosquitoes, and Moths)

General Surface Treatments:

For control of HOUSE FLIES, STABLE FLIES, MOTHS, MOSQUITOES, NUISANCE FLIES (GNATS, MIDGES), and other similar flying pest insects such as those classified as Dipterous or Hymenopterous. ARCHER Insect Growth Regulator is similar to insect growth hormones that occur naturally in flies and other flying insects, having effects on both adult and juvenile stages. In house flies, ARCHER Insect Growth Regulator causes a decrease in the number and hatching of eggs laid by treated adults. Fly larvae (maggots) show physiological and functional defects leading to the inability to develop into normal adults. When used alone, ARCHER Insect Growth Regulator will result in a reduction in adult fly populations after 3 to 4 weeks when previously hatched adult flies have died naturally.

ARCHER Insect Growth Regulator may be used for control of flying insect pests in those areas in, on, and around buildings as previously described under "DIRECTIONS FOR USE." These areas include, but are not limited to, residential, commercial, public, industrial, and agricultural buildings for the purposes of controlling general and occasional insect pests. ARCHER Insect Growth Regulator may be used to control nuisance flies, gnats, midges, and mosquitoes by application into moist breeding areas (potted plants, moist debris, or litter) or into areas holding standing water such as gutters, drains, pools, and fountains.

- Do not apply directly to any natural bodies of water such as ponds, lakes, streams, rivers, marshes, pot holes, and estuaries.
- If needed, repeat treatments with ARCHER Insect Growth Regulator may be made 14 days after previous treatment, or if heavy rainfall occurs, repeat as necessary.

Treatments in Combination with an Adulticide:

For knockdown and more rapid control of adult flying insect pests or to control an influx of flies from untreated areas, use ARCHER Insect Growth Regulator in alternation or in a tankmix combination with an adulticide insecticide such as DEMAND CS, DEMAND PESTAB, or DEMON WP Insecticides. As an IPM strategy, combining or alternating ARCHER Insect Growth Regulator with other types of chemicals, such as pyrethroid or organophosphate insecticides, can reduce or prevent the development of genetic resistance to these adulticide insecticides.

Tankmixes:

Make applications in accordance with those label instructions that are consistent for each product. Prepare the tankmix using the recommended label rate of adulticide and ARCHER Insect Growth Regulator by adding the adulticide first and making sure it is well mixed and in suspension, then adding the correct amount of ARCHER Insect Growth Regulator according to the label instructions below.

ARCHER Insect Growth Regulator may be combined with an adulticide insecticide such as DEMAND CS registered for the control of flying insects. The combination would provide for immediate control of adult flying insects such as flies on resting surfaces such as walls and overhead areas, while preventing immature insect stages from developing into adults. This combination application should conform to accepted use precautions and directions for both products. Use ARCHER Insect Growth Regulator at application rates specified in previous chart and refer to other adulticide labels for specific rates and restrictions.

Treatments In, On, and Around Livestock and Poultry Housing and Pet Kennels:

ARCHER Insect Growth Regulator may be used by pest control operators or livestock producers in livestock housing structures (including poultry houses) and pet kennels to control flying insect pests. Apply as a general surface, fogger/ULV, or a crack and crevice application to areas where flying pests collect or breed.

For surface applications, thoroughly wet floors, walls, ceilings, doors, around windows, garbage, and refuse areas. When used as directed, ARCHER Insect Growth Regulator will not harm beneficial insects in animal litter or bedding, such as predatory wasps. Control will be enhanced when facilities are cleaned and interior applications are supplemented with exterior perimeter treatments.

- Treat bird cages or stock pens only after removal of animals.

- Do not make interior applications of ARCHER Insect Growth Regulator in areas of facility where animals are present.
- Allow treated areas to dry before allowing animals back in treated areas of facility.
- Do not contaminate or apply to food or foodstuffs, water, or watering equipment.

Treatments to Interior Areas and Surfaces:

Use 1 fluid ounce of ARCHER Insect Growth Regulator per gallon of water and apply to 1,500 square feet of surface area, or in sufficient volume to achieve adequate coverage. Treat all areas where flying insects may collect, rest, or breed, including vertical walls, ceilings, pipes, conduits, stalls, stanchions, floors, and walkways. When ARCHER Insect Growth Regulator is used alone, treatments can be extended to animal bedding, manure, and other potential areas where flying insects may breed.

Treatments to Perimeter Areas and Surfaces:

Use 1 fluid ounce of ARCHER Insect Growth Regulator per gallon of water and apply to outside surfaces of buildings, porches, patios, garages, and other areas where these pests have been seen or found. For perimeter control, make a general surface application of 1 ounce of product diluted in water such as to cover 1,500 square feet, or in sufficient volume to achieve adequate coverage. To help prevent infestations of buildings by flying insects, treat soil, vegetation, or other substrates in a band 6 to 10 feet wide adjacent to the building foundations, walls, around doors and windows, and overhead areas where these pests are active and may find entrance or harborage.

STORAGE AND DISPOSAL

STORAGE: Store in a cool, dry place. Keep container closed.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL: Do not reuse empty container. Render container unusable. Wrap container in several layers of newspaper and discard in trash.

ARCHER®, DEMON®, DEMAND®, PESTAB®, and PRELUDE® are trademarks of a ZENECA Group Company.

Defend® is a trademark of Schering-Plough Animal Health Corporation.

© 1998. ZENECA Inc.

This is a specimen label and may be inaccurate or out of date. It is intended as a guide in providing general information regarding use of this product. Always read and follow the EPA approved label on the product container.

For current information, contact ZENECA Professional Products at 1-888-617-7690.

089803

ZENECA Professional Products

1800 Concord Pike
Wilmington, DE 19850-5458

ZENECA Ag Products

MATERIAL SAFETY DATA SHEET

Archer Insect Growth Regulator

Version: 1

Date issued: 08/19/98

MSDS No. US006047_01

Date printed: 08/20/98

Section 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Company : Zeneca Agricultural Products
1800 Concord Pike
Wilmington DE 19850

Phone number : (302) 886-1000

Emergency phone : Medical: 800-327-8633 (1-800 FASTMED)
Chemtrec: 800-424-9300
Technical: 302-886-3000

Name used on label : Archer Insect Growth Regulator

A Registered Trade Mark of a Zeneca Group Company.

Section 2 – COMPOSITION/INFORMATION ON INGREDIENTS

Identity	CAS-no.	Typical %	Other information
Pyriproxifen	95737-68-1	1.3 %	Active Ingredient
Other Ingredients:		98.7 %	

Section 3 – HAZARDS IDENTIFICATION

Physical hazards:

Combustible liquid

Health hazards:

Irritant (skin, eye, respiratory passages).

Section 4 – FIRST AID MEASURES

IF IN EYES:

Immediately flush with plenty of water for at least 15 minutes. If redness, itching or a burning sensation develops, have eyes examined and treated by medical personnel.

IF ON SKIN:

Wash material off the skin with plenty of soap and water. If redness, itching or a burning sensation develops, get medical attention. Wash contaminated clothing and decontaminate footwear before reuse.

ZENECA Ag Products

MATERIAL SAFETY DATA SHEET

Archer Insect Growth Regulator

Version: 1

Date issued: 08/19/98

MSDS No. US006047_01

Date printed: 08/20/98

IF SWALLOWED:

DO NOT INDUCE VOMITING. Provided the patient is conscious, give 1 or 2 glasses of water to drink. Immediately contact Zeneca's Emergency Information Network at 1-800-F-A-S-T-M-E-D (327-8633). Never give anything by mouth to an unconscious person.

IF INHALED:

Remove victim to fresh air. If cough or other respiratory symptoms develop, consult medical personnel.

Section 5 – FIRE FIGHTING MEASURES

Flash point :

153 °F

Method: (Setaflash CC)

Autoignition temperature :

No data.

Flammable limits (STP) :

No data.

EXTINGUISHING MEDIA:

Foam, carbon dioxide or dry chemical.

PROTECTIVE EQUIPMENT:

Self-contained breathing apparatus with full facepiece and protective clothing.

Unusual fire and explosion hazards:

Combustible liquid by OSHA 29 CFR 1910.1200. If heated above the flash point, heavy vapors can flow along surfaces to distant ignition sources and flash back.

Section 6 – ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS:

Steps to be taken in case material is released or spilled:

Make sure all personnel involved in the spill cleanup follow good industrial hygiene practices. A small spill can be handled routinely. Use adequate ventilation and wear an air-supplied respirator to prevent inhalation. Wear suitable protective clothing and eye protection to prevent skin and eye contact.

METHODS FOR CLEANING UP:

Do not allow the material to enter streams, sewers or other waterways.

Sweep up spilled material being careful not to create dust. Shovel sweepings into an open drum.

Generously cover the contaminated areas with common, household detergent (e.g. TIDE, registered trademark of Proctor & Gamble Co.). Using a stiff

ZENECA Ag Products

MATERIAL SAFETY DATA SHEET

Archer Insect Growth Regulator

Version: 1

Date issued: 08/19/98

MSDS No. US006047_01

Date printed: 08/20/98

brush and small amounts of water, work the detergent into the remaining spilled material forming a slurry. Brush the slurry into cracks and crevices and allow to stand for 2-3 minutes. Be careful to completely avoid skin or eye contact. Do not splatter on oneself or bystanders. Spread absorbent on the slurry liquid and shovel mixture into the open drum.

Rinse with small amount of water and use absorbent to collect the wash solution. Shovel into the open drum.

Seal drum and dispose of contaminated material in a facility permitted for hazardous waste. Large spills should be handled according to a spill plan. Otherwise, in case of emergency call, day or night, 800-424-9300, Chemtrec.

Section 7 – HANDLING AND STORAGE

REQUIREMENTS FOR STORAGE ROOMS:

Containers should be stored in a cool, dry, well-ventilated area away from flammable materials and sources of heat or flame. Exercise due caution to prevent damage to or leakage from the container.

ADDITIONAL INFORMATION:

Do not store near feed, food, or within the reach of children.

Section 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure limits

TLV or suggested control value:

No ACGIH TLV or OSHA PEL assigned. Minimize exposure in accordance with good hygiene practice.

VENTILATION:

Use ventilation adequate to maintain safe levels.

This product is intended for dilution with water for use where engineering controls are not necessary. If use conditions are different (e.g. product reformulation or repackaging), use ventilation adequate to maintain safe levels.

EYE PROTECTION:

Eye contact with the material should be avoided through the use of chemical safety glasses, goggles or a faceshield, selected in regard to exposure potential.

BODY PROTECTION:

Skin contact should be prevented through the use of footwear, impervious gloves and long-sleeved clothing. Remove contaminated clothing and wash before rewearing. Wash separately from other laundry.

RESPIRATORY PROTECTION:

If needed, use MSHA/NIOSH approved respirator for pesticides and organic

ZENECA Ag Products

MATERIAL SAFETY DATA SHEET

Archer Insect Growth Regulator

Version: 1

Date issued: 08/19/98

MSDS No. US006047_01

Date printed: 08/20/98

solvents.

Other protective equipment:

This product is FIFRA regulated. Refer to product labeling for specific end-use requirements.

Special precautions or other comments:

Follow procedures specified in the National Fire Protection Association codes and standards for handling combustible liquids. Prevent skin and eye contact with this material. Avoid breathing vapors or aerosols.

Section 9 – PHYSICAL AND CHEMICAL PROPERTIES

Form	:	liquid
Color	:	colorless
Odor	:	petroleum solvent
Boiling point	:	No data.
Vapor Pressure	:	
		at 20 °C
		Method: mmHg
		2.8 x 10 ⁻⁵
Vapour density	:	No data.
		(air = 1)
Specific gravity:	:	
		at 20 °C
		0.8470
Solubility	:	emulsifiable
pH-value (quant.)	:	
(qual.)	:	No data
Volatile by volume:	:	
		No data.

Section 10 – STABILITY AND REACTIVITY

HAZARDOUS REACTIONS (CONDITIONS TO AVOID)

Stability:

Stable under normal conditions.

Incompatibility:

Heat and acidic or alkaline conditions may cause this product to break down. Contact with strong oxidizing agents may produce an explosive mixture.

Hazardous polymerization:

Will not occur.

HAZARDOUS DECOMPOSITION PRODUCTS

Combustion products - Carbon dioxide, carbon monoxide.

ZENECA Ag Products

MATERIAL SAFETY DATA SHEET

Archer Insect Growth Regulator

Version: 1

Date issued: 08/19/98

MSDS No. US006047_01

Date printed: 08/20/98

Section 11 – TOXICOLOGICAL INFORMATION

ACUTE TOXICITY (LETHAL DOSES)

LD50 Ingestion rat

Dose : > 5000 mg/kg

Additional inform. : Can cause stomach irritation, resulting in nausea, cramping and vomiting.

LD50 Dermal

Dose : > 2000 mg/kg

Additional inform. : Repeated and/or prolonged contact may cause irritation and dermatitis. This material was not a skin sensitizer in animal testing.

LC50 Inhalation rat

Dose : > 7.6 mg/l

Period : 4 hours

Additional inform. : Excessive inhalation can cause nasal and respiratory irritation.

ACUTE TOXICITY (IRRITATION, SENSITIZATION ETC.)

Eye contact

Additional inform. : Can cause temporary irritation, tearing and blurred vision.

GENERAL INFORMATION ABOUT ACUTE OR OTHER TOXICITIES

General information

This description of toxicological properties is based on experimental results and experience with the material.

Other effects of overexposure:

No other adverse clinical effects have been associated with exposure to this material.

Section 12 – ECOLOGICAL INFORMATION

ADDITIONAL INFORMATION ABOUT ECOLOGY

Toxic to fish.

ZENECA Ag Products

MATERIAL SAFETY DATA SHEET

Archer Insect Growth Regulator

Version: 1

Date issued: 08/19/98

MSDS No. US006047_01

Date printed: 08/20/98

Section 13 – DISPOSAL CONSIDERATIONS

Disposal Method:

Discarded product is not a hazardous waste under RCRA, 40 CFR 261.

Container disposal:

Empty container retains product residue. Observe all hazard precautions. Do not distribute or make available, furnish or reuse empty container except for storage and shipment of original product. Remove all product residue from container and puncture or otherwise destroy empty container before disposal.

Section 14 – TRANSPORT INFORMATION

ROAD TRANSPORT DOT

Inform. applies to: NON-BULK:

ROAD TRANSPORT DOT

Not regulated by DOT.

Section 15 – REGULATORY INFORMATION

Other regulations, restrictions and prohibitions

TSCA (Toxic Substances Control Act) Regulations, 40CFR 710:

This product is a pesticide and is exempt from TSCA regulation.

CERCLA and SARA Regulations (40 CFR 355, 370, and 372):

Section 313 Supplier Notification. This product contains the following toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372:

Glycol ethers, not more than 2.10%.

EPA

EPA Registration no.: 10182-433

Section 16 – OTHER INFORMATION

ZENECA Ag Products believes that the information and recommendations contained herein (including data and statements) are accurate as of the date thereof. NO WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE, WARRANTY OF MERCHANTABILITY, OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, IS MADE CONCERNING THE INFORMATION PROVIDED HEREIN.

ZENECA Ag Products

MATERIAL SAFETY DATA SHEET

Archer Insect Growth Regulator

Version: 1

Date issued: 08/19/98

MSDS No. US006047_01

Date printed: 08/20/98

The information provided herein relates to the specific product designated and may not be valid where such product is used in combination with any other materials or in any process. Further, since the conditions and methods of use of the product and of the information referred to herein are beyond the control of ZENECA Ag Products, ZENECA Ag Products expressly disclaims any and all liability as to any results obtained or arising from any use of the product or reliance on such information.

A vertical bar (|) in the left margin indicates an amendment from the previous version.